

IN THE CLAIMS

Please amend the claims as follows:

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Claim 1 (Previously Presented): A liquid crystal display device comprising: a sealing material provided on a periphery of a substrate for preventing leakage of liquid crystal, projections formed by etching a film formed on the substrate, and another substrate opposing the substrate being remote therefrom by a gap and being supported by the projections, wherein an area occupying ratio of the projections with respect to a region enclosed by the sealing material is not less than 0.001 and not more than 0.003.

Claim 2 (Currently Amended): The liquid crystal display device of Claim 1, wherein the area occupying ~~rate~~ ratio is not less than 0.001 and not more than 0.002.

Claim 3 (Currently Amended): The liquid crystal display device of Claim 1, wherein the area occupying ~~rate~~ ratio is not less than 0.001 and not more than 0.0015.

Claim 4 (Original): The liquid crystal display device of any one of Claims 1-3, wherein the film is formed of acrylic resin.

Claim 5 (Previously Presented): The liquid crystal display device of Claim 1, wherein heights of projections are varied.

Claim 6 (Currently Amended): The liquid crystal display device of ~~claims~~ Claim 5, wherein the heights are different by not less than 0.05  $\mu\text{m}$ .

Claim 7 (Previously Presented): The liquid crystal display device of Claim 5, wherein the heights are different by not less than 0.05  $\mu\text{m}$  and not more than 0.2  $\mu\text{m}$ .

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Claim 8 (Currently Amended): A method for manufacturing liquid crystal display device comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form ~~except~~ except for an injection inlet for liquid crystal; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a pressure of not less than 20,000 Pa and not more than 40,000 Pa to surfaces of both substrates.

Claim 9 (Previously Presented): The method of claim 8, wherein a sealing agent is applied to the liquid crystal injection inlet simultaneously with applying pressure to the surfaces of both substrates.

Claim 10 (Previously Presented): A method for manufacturing a liquid crystal display device comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a sealing agent to the injection inlet of the liquid crystal display device after elapse of a specified time from completion of injecting liquid crystal.

Claim 11 (Previously Presented): The method of Claim 10, wherein the specified time is not less than 30 minutes and not more than 60 minutes.

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Claim 12 (Previously Presented): A method for manufacturing liquid crystal display device comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal, an area occupying ratio of the projections with respect to a region enclosed by the sealing material being designed to be not less than 0.001 and not more than 0.003; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a pressure of not less than 20,000 Pa and not more than 40,000 Pa to surfaces of both substrates.

Claim 13 (Previously Presented): A method for manufacturing a liquid crystal display device comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal, an area occupying ratio of the projections with respect to a region enclosed by the sealing material being designed to be not less than 0.001 and not more than 0.003; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the seal agent; and applying a sealing agent to the injection inlet of the liquid crystal display device after elapse of a specified time from completion of injecting liquid crystal.

Claim 14 (Previously Presented): A liquid crystal display device of a transverse field method comprising: a sealing material provided on a periphery of a substrate for preventing leakage of liquid crystal, projections formed by etching a film formed on the substrate, and another substrate opposing the substrate being remote therefrom by a gap and being supported by the projections, wherein an area occupying ratio of the projections with respect to a region enclosed by the sealing material is not less than 0.001 and not more than 0.003, and heights of projections are varied.

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Claim 15 (Previously Presented): The liquid crystal display device of Claim 14, wherein the heights are different by not less than 0.05  $\mu\text{m}$ .

Claim 16 (Previously Presented): The liquid crystal display device of Claim 14, wherein the heights are different by not less than 0.05  $\mu\text{m}$  and not more than 0.2  $\mu\text{m}$ .

Claim 17 (Previously Presented): A liquid crystal display device of a transverse field method comprising: a sealing material provided on a periphery of a substrate for preventing leakage of liquid crystal, projections formed by etching a film formed on the substrate, and another substrate opposing the substrate being remote therefrom by a gap and being supported by the projections, wherein an area occupying ratio of the projections with respect to a region enclosed by the sealing material is not less than 0.0014 and not more than 0.0029, and height of projections are varied by not less than 0.05  $\mu\text{m}$  and not more than 0.2  $\mu\text{m}$ .

Claim 18 (Previously Presented): A method for manufacturing liquid crystal display device of a transverse field method comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form

except for an injection inlet for liquid crystal; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a pressure of not less than 20,000 Pa and not more than 40,000 Pa to surfaces of both substrates, wherein a sealing agent is applied to the liquid crystal injection inlet simultaneously with applying pressure to surfaces of both substrates.

Claim 19 (Previously Presented): A method for manufacturing a liquid crystal display device of a transverse field method comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a sealing agent to the injection inlet of the liquid crystal display device after elapse of a specified time from completion of injecting liquid crystal.

Claim 20 (Previously Presented): The method of Claim 19, wherein the specified time is not less than 30 minutes and not more than 60 minutes.

Claim 21 (Previously Presented): A method for manufacturing liquid crystal display device of a transverse field method comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal, an area occupying ratio of the projections with respect to a region enclosed by the sealing material being designed to be not less than 0.001 and not more than 0.003; overlapping another substrate onto the substrate with the projections

and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a pressure of not less than 20,000 Pa and not more than 40,000 Pa to surfaces of both substrates.

Claim 22 (Previously Presented): A method for manufacturing a liquid crystal display device of a transverse field method comprising: forming projections by etching a film formed on a substrate; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal, an area occupying ratio of the projections with respect to a region enclosed by the sealing material being designed to be not less than 0.001 and not more than 0.003; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the seal agent; and applying a sealing agent to the injection inlet of the liquid crystal display device after elapse of a specified time from completion of injecting liquid crystal, the specified time being not less than 30 minutes and not more than 60 minutes.

Claim 23 (Previously Presented): A method for manufacturing a liquid crystal display of a transverse field method device comprising: forming projections by etching a film formed on a substrate, heights of projections being varied by not less than 0.05  $\mu\text{m}$  and not more than 0.2  $\mu\text{m}$ ; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal, an area occupying ratio of the projections with respect to a region enclosed by the sealing material being designed to be not less than 0.0014 and not more than 0.0029; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid

crystal injection inlet into a region enclosed by the sealing material; and applying a sealing agent to the injection inlet of the liquid crystal display device after elapse of a specified time from completion of injecting liquid crystal, the specified time being not less than 30 minutes and not more than 60 minutes.

Claim 24 (Previously Presented): A method for manufacturing liquid crystal display device of a transverse field method comprising: forming projections by etching a film formed on a substrate, heights of projections being varied by not less than 0.05  $\mu\text{m}$  and not more than 0.02  $\mu\text{m}$ ; applying a sealing material on a periphery of the substrate in an annular form except for an injection inlet for liquid crystal, an area occupying ratio of the projections with respect to a region enclosed by the sealing material being designed to be not less than 0.0014 and not more than 0.0029; overlapping another substrate onto the substrate with the projections and the sealing material being interposed therebetween; injecting liquid crystal through the liquid crystal injection inlet into a region enclosed by the sealing material; and applying a pressure of not less than 20,000 Pa and not more than 40,000 Pa to surfaces of both substrates.

DISCUSSION OF THE AMENDMENT

The specification and Claim 8 have each been amended to correct an obvious spelling error. Claims 2 and 3 have each been amended by changing the word "rate" to --ratio--, to be consistent with the amendment to Claim 1 made in the amendment filed April 4, 2003.

Claim 6 has been amended to correct a typographical error.

No new matter has been added by the above amendment. Claims 1-24 remain pending in the application.